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# Ultraprocessed Foods Account for More than Half of Calories Consumed at Home

*U.S. home consumption of ultraprocessed foods increasing at faster pace than consumption outside the home*

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CANCER | FOOD/NUTRITION | NONCOMMUNICABLE DISEASES | OBESITY

A new analysis led by researchers at the Johns Hopkins Bloomberg School of Public Health found that more than half of calories consumed at home by adults in the U.S. come from ultraprocessed foods.

Ultraprocessed foods contain substances with little or no nutritional value, such as colorings, emulsifiers, artificial flavors, and sweeteners. Examples cover a wide range of products, from chips and hot dogs to prepackaged meals. Researchers have long understood that a substantial proportion of the U.S. diet comes from ultraprocessed foods but it was not clearly understood where those calories were consumed.

Consuming high amounts of ultraprocessed food has been linked to chronic health conditions—cardiovascular disease, obesity, colorectal cancer, among others. The new findings suggest additional measures are needed to promote healthier alternatives for preparing meals at home.

The study (https://www.sciencedirect.com/science/article/pii/S0022316624011258?via%3Dihub) was published online December 5 in the *Journal of Nutrition*.

“The perception can be that ‘junk food’ and ultraprocessed foods are equivalent,” says Julia Wolfson (https://publichealth.jhu.edu/faculty/4077/julia-wolfson), PhD, MPP, associate professor in the Bloomberg School’s Department of International Health and the study’s lead author. “Yet ultraprocessed foods encompass many more products than just junk food or fast food, including most of the foods in the grocery store. The proliferation and ubiquity of ultraprocessed foods on grocery store shelves is changing what we are eating when we make meals at home.”

For their analysis, the researchers used data from the 2003–2018 National Health and Nutrition Examination Survey (NHANES), a nationally representative annual survey of more than 34,000 adults over 20 years of age.

On two separate days, NHANES participants were asked about the foods they had eaten in the past 24 hours and where they had consumed the food—at home or away from home. Using the Nova Food Group Classification, a well-established framework for grouping foods by extent of processing, foods were assigned to one of four categories: 1) unprocessed or minimally processed, 2) processed culinary ingredient, 3) processed, 4) ultraprocessed.

The researchers compared ultraprocessed to minimally processed food intake. Foods with artificial ingredients and colors, including many fast foods and prepacked meals available at grocery stores, were categorized as ultraprocessed foods. Fruits, vegetables, and other whole foods, including frozen and dried foods without additional salt or other ingredients, were considered minimally processed foods.

Overall, ultraprocessed foods comprised more than half of all calories consumed at home, rising from 51% in 2003 to 54% in 2018. The researchers found only minor differences in trends of ultraprocessed food intake at home by sex, age, race/ethnicity, income, and education over the study period. Ultraprocessed food intake at home was slightly lower than 50% in some years from 2003 to 2018 for two groups: Hispanics and higher-income households. The proportion of at-home calories from ultraprocessed foods never fell below 49% for the high-income group or 47% among Hispanics.

About one-third of all calories came from eating foods away from home. For those with less than a high school degree, away-from-home consumption of ultraprocessed foods rose nearly eight percentage points, from 59.2% in 2003 to 67.1% in 2018 of all away-from-home calories consumed in 2018. That proportion hovered around 60% for individuals with a high school degree or more.

Overall, the proportion of total calories from minimally processed foods fell nearly five percentage points from 33.2% in 2003 to 28.5% in 2018, and minimally processed food intake declined both at home and away from home for most groups. These results, the authors say, speak to the many challenges of procuring and preparing minimally processed, scratch ingredients such as fresh vegetables, meat, and fish. Ultraprocessed foods tend to be easier and faster to prepare, and often are less expensive and more shelf stable than scratch ingredients.

“We need strategies to help people choose less processed foods and avoid unhealthy ultraprocessed foods for foods purchased for both at-home and away-from-home consumption,” adds Wolfson. “Additionally, strong nutrition labels warning of high ultraprocessed food content may be warranted.”

The authors note that the study has limitations, including possible reporting bias—people may underreport eating foods that they believe are not good for them. The authors also note that the study period occurred before the pandemic and does not reflect changes in at-home food consumption during this period.

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Trends in Adults’ Intake of Un-processed/Minimally Processed, and Ultra-processed foods at Home and Away from Home in the United States from 2003–2018 (https://www.sciencedirect.com/science/article/abs/pii/S0022316624011258?via%3Dihub) was written by Julia A. Wolfson, Anna Claire Tucker, Cindy W. Leung, Casey M. Rebholz, Vanessa Garcia-Larsen, Euridice Martinez-Steele.

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